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(FILE 'HOME' ENTERED AT 14:24:57 ON 14 SEP 1998)

FILE 'AIDSLINE, BIOSIS, CANCERLIT, CAPLUS, CEN, DGENE, DISSABS, DRUGB, DRUGLAUNCH, DRUGNL, DRUGU, EMBAL, EMBASE, IFIPAT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDLINE, NAPRALERT, NLDB, PHIC, PHIN, PNI, SCISEARCH, TOXLINE, TOXLIT, USPATFULL' ENTERED AT 14:26:17 ON 14 SEP 1998

E DYMECKI S/AU

L1 70 S E3-E7
L2 18 DUPLICATE REMOVE L1 (52 DUPLICATES REMOVED)
L3 2 S L2 AND FLP

=> d L3 1-2 ibib ab

L3 ANSWER 1 OF 2 BIOSIS COPYRIGHT 1998 BIOSIS

ACCESSION NUMBER: 96:332306 BIOSIS

DOCUMENT NUMBER: 99054662

TITLE: **Flp** recombinase promotes site-specific DNA recombination in embryonic stem cells and transgenic mice.

AUTHOR(S): **Dymecki S M**

CORPORATE SOURCE: Dep. Embryol., Carnegie Inst. Wash., Baltimore, MD 21210, USA

SOURCE: Proceedings of the National Academy of Sciences of the United States of America 93 (12). 1996. 6191-6196. ISSN: 0027-8424

LANGUAGE: English

AB Site-specific recombinases are being developed as tools for "in vivo" genetic engineering because they can catalyze precise excisions, integrations, inversions, or translocations of DNA between their distinct recognition target sites. Here it is demonstrated that **Flp** recombinase can effectively mediate site-specific excisional recombination in mouse embryonic stem cells, in differentiating embryonal carcinoma cells, and in transgenic mice. Broad **Flp** expression is compatible with normal development, suggesting that **Flp** can be used to catalyze recombination in most cell types. These properties indicate that **Flp** can be exploited to make prescribed alterations in the mouse genome.

L3 ANSWER 2 OF 2 BIOSIS COPYRIGHT 1998 BIOSIS

ACCESSION NUMBER: 96:332274 BIOSIS

DOCUMENT NUMBER: 99054630

TITLE: A modular set of **Flp**, FRT and lacZ fusion vectors for manipulating genes by site-specific recombination.

AUTHOR(S): **Dymecki S M**

CORPORATE SOURCE: Dep. Embryol., Carnegie Inst. Washington, 115 W. University Pkwy., Baltimore, MD 21210, USA

SOURCE: Gene (Amsterdam) 171 (2). 1996. 197-201. ISSN: 0378-1119

LANGUAGE: English

AB Site-specific recombinases can serve as powerful tools to target

genetic manipulations to specific cell populations in culture and in the organism. A series of vectors for engineering gene activation, deletion and integration in mammalian cells using **Flp** recombinase is described here. The vectors are modular in design so that specific cassettes can be linked depending on the application. Using these vectors, efficient **Flp**-mediated lacZ activation and beta-galactosidase (beta-Gal) detection has been demonstrated in mammalian cell culture. These vectors should facilitate using **Flp** to mark cell populations, as well as to activate, remove or mutate genes in culture and in the mouse.

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(FILE 'USPAT' ENTERED AT 14:22:39 ON 14 SEP 1998)

E DYMECKI/IN

L1 26728 S RECOMBINA?

L2 1863 S L1 AND TRANSGEN?

L3 28 S L2 AND FLP

L4 26 S L3 AND (MOUSE OR MICE)